

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 6<sup>th</sup> September, 2019

District: Thoubal

<b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30 <sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max & 69 % min was recorded in the past three days & average wind speed was 2.6–3.4 km/ hr.	<b>Weather forecast for Thoubal (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-33 °C & mini. temp. 23-24 °C. Relative humidity may reach upto 99% (max) & 77 % (min). The average wind speed may be 3 km/hr.
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
		Sucking insect	- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.
Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

**Animal Sciences**

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.

**Fishery:**

<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 6<sup>th</sup> September, 2019

District: Ukhrul

<b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30 <sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max & 69 % min was recorded in the past three days & average wind speed was 2.6–3.4 km/ hr.	<b>Weather forecast for Ukhrul (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-33 °C & mini. temp. 22 °C. Relative humidity may reach upto 99% (max) & 75 % (min). The average wind speed may be 2-3 km/hr.
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
		Sucking insect	- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.
Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

**Animal Sciences**

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.

**Fishery:**

<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**

Date of issue: 6<sup>th</sup> September, 2019

District: Bishnupur

<p><b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30<sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max &amp; 69 % min was recorded in the past three days &amp; average wind speed was 2.6–3.4 km/ hr.</p>	<p><b>Weather forecast for Bishnupur (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 32-35 °C &amp; mini. temp. 24-25 °C. Relative humidity may reach upto 100% (max) &amp; 61 % (min). The average wind speed may be 2-4 km/hr.</p>
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
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Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

**Animal Sciences**

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.

**Fishery:**

<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
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(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**

Date of issue: 6<sup>th</sup> September, 2019

District: Chandel

<p><b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30<sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max &amp; 69 % min was recorded in the past three days &amp; average wind speed was 2.6–3.4 km/ hr.</p>	<p><b>Weather forecast for Chandel (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 33-35 °C &amp; mini. temp. 25-26 °C. Relative humidity may reach upto 99% (max) &amp; 74 % (min). The average wind speed may be 2-3 km/hr.</p>
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
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**Animal Sciences**

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**Fishery:**

<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 6<sup>th</sup> September, 2019

District: Churachandpur

<b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30 <sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max & 69 % min was recorded in the past three days & average wind speed was 2.6–3.4 km/ hr.	<b>Weather forecast for Churachandpur (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-33 °C & mini. temp. 22 °C. Relative humidity may reach upto 99% (max) & 69 % (min). The average wind speed may be 2-3 km/hr.
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
		Sucking insect	- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.
Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

**Animal Sciences**

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.

**Fishery:**

<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**

Date of issue: 6<sup>th</sup> September, 2019

District: Imphal West

<p><b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30<sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max &amp; 69 % min was recorded in the past three days &amp; average wind speed was 2.6–3.4 km/ hr.</p>	<p><b>Weather forecast for Imphal West (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-31 °C &amp; mini. temp. 22 °C. Relative humidity may reach upto 99% (max) &amp; 55 % (min). The average wind speed may be 2-5 km/hr.</p>
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
		Sucking insect	- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.
Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.
<b>Animal Sciences</b>			
<b>Name of bird/ animal</b>	<b>Stage</b>	<b>Disease/ Management</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
<b>Fishery:</b>			
<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**

Date of issue: 6<sup>th</sup> September, 2019

District: Imphal East

<p><b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30<sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max &amp; 69 % min was recorded in the past three days &amp; average wind speed was 2.6–3.4 km/ hr.</p>	<p><b>Weather forecast for Imphal East (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-31 °C &amp; mini. temp. 23 °C. Relative humidity may reach upto 97% (max) &amp; 62 % (min). The average wind speed may be 3-4 km/hr.</p>
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Kharif Rice</b>	Tillering to panicle initiation		<ul style="list-style-type: none"> <li>- Maintain water level of 5-8 cm in the crop field.</li> <li>- Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.</li> </ul>
		Sucking insect	<ul style="list-style-type: none"> <li>- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.</li> </ul>
<b>Soybean/ Groundnut/ Rice Bean</b>	Flowering to fruiting/ pegging	Rust in Soybean	<ul style="list-style-type: none"> <li>- Weeding may be done to keep the plot clean to avoid insect pest infestation.</li> <li>- Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.</li> </ul>
		Tikka disease in groundnut	<ul style="list-style-type: none"> <li>- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.</li> </ul>
		Hairy caterpillars	<ul style="list-style-type: none"> <li>- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).</li> </ul>
<b>Millet</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done to keep the plot clean to avoid insect pest infestation.</li> </ul>
<b>Blackgram</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done to keep the plot clean to avoid insect pest infestation.</li> </ul>
<b>Potato</b>	Land preparation		<ul style="list-style-type: none"> <li>- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.</li> </ul>
<b>Seed storage</b>	Post-harvest Management		<ul style="list-style-type: none"> <li>- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</li> </ul>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Rabi vegetables</b>	Nursery		<ul style="list-style-type: none"> <li>- Raising nurseries of rabi vegetables.</li> <li>- Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight.</li> <li>- Procure good quality seeds from reliable sources.</li> </ul>
<b>Cauliflower</b>	Nursery transplanting		<ul style="list-style-type: none"> <li>Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.</li> </ul>
<b>French Bean, Broad bean &amp; Pea</b>	Land preparation		<ul style="list-style-type: none"> <li>Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.</li> </ul>



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

**Animal Sciences**

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.

**Fishery:**

<b>Fishery:</b>			
<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**

Date of issue: 6<sup>th</sup> September, 2019

District: *Senapati*

<p><b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30<sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max &amp; 69 % min was recorded in the past three days &amp; average wind speed was 2.6–3.4 km/ hr.</p>	<p><b>Weather forecast for Senapati (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-33 °C &amp; mini. temp. 23-24 °C. Relative humidity may reach upto 99% (max) &amp; 77 % (min). The average wind speed may be 3 km/hr.</p>
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
		Sucking insect	- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.
Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

**Animal Sciences**

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
<b>Pig</b>	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Fascioliasis	- De-worming with suitable Anthelmatics against Fascioliasis.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	- Provide wholesome water.
<b>Goat</b>	All age groups except three months or below	Fascioliasis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.

**Fishery:**

<b>Fishery:</b>			
<b>Carp culture</b>	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**

Date of issue: 6<sup>th</sup> September, 2019

District: Tamenglong

<p><b>Past weather for the of Imphal West (3<sup>rd</sup> to 5<sup>th</sup> Sept, 2019):</b> 18.3 mm rainfall was observed during the past three days. The skies remained mainly clear to partly cloudy on 30<sup>th</sup> then mainly cloudy to overcast thereafter. Maximum temperature ranged from 28.4–31.8 °C and minimum of 22.2–23.0 °C. Mean relative humidity of 88 % max &amp; 69 % min was recorded in the past three days &amp; average wind speed was 2.6–3.4 km/ hr.</p>	<p><b>Weather forecast for Tamenglong (7<sup>th</sup> to 11<sup>th</sup> Sept, 2019):</b> Likely to have widespread light to moderate rains from Sunday to Wednesday. The sky will remain mainly cloudy to overcast with max. temp. 30-32 °C &amp; mini. temp. 24-25 °C. Relative humidity may reach upto 100% (max) &amp; 67 % (min). The average wind speed may be 3-4 km/hr.</p>
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**General Advisory:**

1. Monitor insect-pest infestation in crops.
2. Insect pest management sprays may be done before rains.
3. Harvest rain water if it rains.
4. Provide clean drinking water for birds and animals.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering to panicle initiation		- Maintain water level of 5-8 cm in the crop field. - Weeding may be done. Apply Urea @33kg/ha at PI stage after complete drainage of water. Irrigate field after 48hrs of top dressing.
		Sheath blight/ sheath rot	- Spray Propiconazole @ 15ml/ 15 lit water after rains. Preferably, drain out water from field before the spray.
		Sucking insect	- Spray Imidachloprid @ 8ml/ 15 litres of water after rains.
Soybean/ Groundnut/ Rice Bean	Flowering to fruiting/ pegging	Rust in Soybean	- Weeding may be done to keep the plot clean to avoid insect pest infestation. - Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval after rains.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Blackgram	Sowing to vegetative		- Weeding may be done to keep the plot clean to avoid insect pest infestation.
Potato	Land preparation		- Prepare land for planting potato for early crop and also for production of seed in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Nursery		- Raising nurseries of rabi vegetables. - Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight. - Procure good quality seeds from reliable sources.
Cauliflower	Nursery transplanting		Field preparation must be completed for transplanting of mid-season variety such as white flash and nursery site for next cauliflower crop such as Swetha may be started so as to give continuous supply to the market.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupama, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawaii (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.



<b>Onion</b>	Land preparation for sowing		- Land preparation for sowing of onion in the <i>hill areas</i> may be done where the temperature have become lower.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval.
<b>King Chilli</b>	Flowering to fruiting		- Uproot and burn the disease infested plants. Spray of Trichoderma @ 10g/ litre of water may be given for control of disease.
		Dieback disease	- After removal of infested plants, drench the soil with copper oxychloride 75WP and give a foliar spray of Fipronil 0.5%SC @ 2ml/ litre of water.
		Leaf curl disease	- After removal of infested plants, spray Neem oil @ 5ml/ litre water to control white fly which is vector for transmission of the disease.

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